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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,168	03/23/2004	Ming-Shyuan Yeh	YEHM3009/EM	2181
23364	7590	11/02/2005	EXAMINER	
BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314			GONZALEZ, JULIO C	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/806,168

Applicant(s)

YEH, MING-SHYUAN

Examiner

Julio C. Gonzalez

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15, 17-22 and 24-27 is/are rejected.
- 7) ☒ Claim(s) 16 and 23 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "10" (page 8) and "11" (page 6) have both been used to designate cylinder. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to because the drawings contain cap 111 (see figure 2), which is used as an injection hole. Is the injection hole 111 also provided via cap being labeled 111 in figure 2?. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet

should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the gears disclosed in claims 17, 18 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any

amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 2, 3, 8, 9, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kershaw (US 6,182,615) in view of Hays et al (US 3,972,195).

Kershaw discloses a system with a pressure accumulating unit having cylinder 11, an energy converting unit having a turbine 40, generator 41 and the fluid out of the cylinder 11 driving turbine 40, a pressure compensating unit having reservoir 12. Also, the cylinder 11 has an inlet for liquid via device 13 and an inlet for pressurized air via device 33 and the pressurized air forces out the liquid (see abstract & figure 2).

Although it is inherent and well known that the liquid out of the cylinder is being sprayed, Hays et al is being cited for the purpose of making a highly efficient power source that a nozzle 15 is used for spraying fluid to a turbine 12 (see figures 1, 2).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a system as disclosed by Kershaw and to disclose explicitly using a nozzle for spraying fluid to a turbine for the purpose of making a highly efficient power source as disclosed by Hays et al.

6. Claims 4, 7, 13, 15, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kershaw and Hays et al as applied to claim 1 above, and further in view of Merswolke et al (US 6,718,761).

The combined system discloses all of the elements above. However, the combined system does not disclose having a pump between a pressure unit and a cylinder.

On the other hand, Merswolke discloses for the purpose of providing an inexpensive power system, cylinders ("WATER STORAGE") receiving compressed air and liquid and a pump ("RETURN PUMP") being used for pumping fluid back to the cylinders (see figure 2).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined system as disclosed above and to use a pump between a cylinder and a pressure compensation unit for the purpose of providing an inexpensive power system as disclosed by Merswolke et al.

7. Claims 10, 11, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kershaw and Hays et al as applied to claim 1 above, and further in view of Wagner (US 4,124,978).

The combined system discloses all of the elements above. However, the combined system does not disclose using a compressor that is powered by battery.

On the other hand, Wagner discloses for the purpose of providing compression system with easy installations, a compressor 23 being powered by battery 11 (see figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined system as disclosed above and to have a compressor being powered by a battery for the purpose of providing compression system with easy installations as disclosed by Wagner.

8. Claims 20, 21, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kershaw and Hays et al and Merswolke et al as applied to claim 1 above, and further in view of Laemthongsawad (US 5,755,553).

The combined system discloses all of the elements above. However, the combined system does not disclose having a base with a penetrated area.

On the other hand, Laemthongsawad discloses for the purpose of improving water turbines, a base with a penetrated area (see figure 2) and a obscuring member 7.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined system as disclosed above and to

have the base with a penetrated area for the purpose of improving water turbines as disclosed by Laemthongsawad.

9. Claims 17, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kershaw and Hays et al as applied to claim 1 above, and further in view of Estigoy et al (US 4,965,998) and McCarty et al (US 5,252,860).

The combined system discloses all of the elements above. However, the combined system does not disclose using a gearing device for driving a generator.

On the other hand, Estigoy et al discloses for the purpose of providing an economical power plant that generator 22 can be driving by gearing devices 44, 24 (see figure 1).

Although it is well known in the art to have a gearing device to drive a turbine, Estigoy does not disclose having a gear directly driving a turbine.

On the other hand, McCarty et al discloses for the purpose of purpose of controlling more efficiently a turbine system, a gear 132 driving a turbine (see figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined system as disclosed above and to use a gear device for driving a generator for the purpose of providing an economical power plant as disclosed by Estigoy et al and to use a gear for driving a

turbine for the purpose of purpose of controlling more efficiently a turbine system as disclosed by McCarty et al.

10. Claims 24, 25, 26, 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kershaw and Hays et al and Wagner as applied to claims 1, 11 above, and further in view of Testa et al (US 4,281,257).

The combined system discloses all of the elements above. However, the combined system does not disclose using a water head for driving a compressor.

On the other hand, Testa et al discloses for the purpose of conserving fuel energy, a water head that drives a compressor 35 (see figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined system as disclosed above and to use a water head for driving a compressor for the purpose of conserving fuel energy as disclosed by Testa et al.

11. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kershaw and Hays et al and Merswolke et al as applied to claim 1 above, and further in view of Bell (US 4,206,608).

The combined system discloses all of the elements above. However, the combined system does not disclose providing power to a pump.

On the other hand, Bell discloses for the purpose of using natural energy efficiently providing electricity to a pump 54 when needed (column 10, lines 11-17).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined system as disclosed above and to provide power to a pump for the purpose of using natural energy efficiently as disclosed by Bell.

12. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kershaw and Hays et al and Merswolke et al and Bell as applied to claims 1, 5 above, and further in view of Agostino (US 5,420,463).

The combined system discloses all of the elements above. However, the combined system does not disclose having a battery for providing power to a pump.

On the other hand, Agostino discloses for the purpose of obtaining more energy out of a fluid flow, a battery 20 providing power to a pump 19 (see figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined system as disclosed above and to provide power to a pump using a battery for the purpose of obtaining more energy out of a fluid flow as disclosed by Agostino.

Allowable Subject Matter

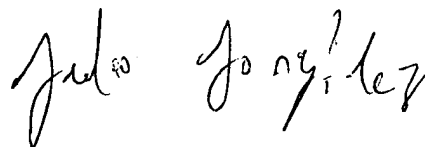
13. Claims 16, 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is 571-272-2024. The examiner can normally be reached on M-F (8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Julio C. Gonzalez
Examiner
Art Unit 2834

Jcg

October 27, 2005